Claims

1. A tube (30) for a microscope (1) with an objective defining an objective optical path (5), the tube (30) defining a tube optical path (16), a binocular head (20) provided at the tube (30) defining an ocular optical path (21), a deflection element being provided in the tube optical path (16), whereby a deflection mirror (18) is provided behind the objective optical path (5), when viewed from the user's (17) position,
characterized in that a single tube-lens system (11) is positioned in the tube optical path (16) and in that a modification to the inclination of the ocular optical path (21) in relation to the horizontal (H) by a value α causes the position of the deflection mirror (18) to be modified by an angle α/2.

2. The tube as claimed in claim 1, characterized in that the single tube-lens system (11) is positioned at the microscope (1) in the region of a connection element (8) in front of the deflection element (15).

3. The tube as claimed in claim 1 or 2, characterized in that the binocular head (20) has two eyepieces (13), in that an intermediate image (12) is created in each of the eyepieces (13) and in that the distance from a lens vertex (39) of the single tube-lens system (11) to the intermediate image (12) is not greater than 1.25 times the focal distance of the tube-lens system (11).

4. The tube as claimed in one of claims 1 to 3, characterized in that the deflection mirror (18) and the binocular head (20) are pivotably embodied and that the pivoting movement thereof is constrainedly coupled.

5. The tube as claimed in claim 4, characterized in that the constrained coupling between the deflection mirror (18) and the binocular head (20) is embodied so that the deflection mirror (18) pivots by an angle value $\alpha/2$ when the binocular head (20) is pivoted by the value α.

6. The tube as claimed in claim 5, characterized in that the deflection mirror defines a pivot axis that runs in the middle of the reflecting surface of the deflection mirror.

7. The tube as claimed in one of claims 4 to 6, characterized in that the binocular head (20) has an adjustable range of the angle α between the horizontal and the ocular optical path of slightly over 0° and 32.5°.

8. The tube as claimed in claim 7, characterized in that the adjustable range of the angle α preferably lies between 7.5° and 32.5°.

9. The tube as claimed in one of claims 1 to 3, characterized in that the deflection mirror and the binocular head (20) are fixedly and unchangeably positioned.

10. The tube as claimed in claim 9, characterized in that the deflection mirror (18) and the binocular head (20) are fixedly and unchangeably positioned.

11. The tube as claimed in one of claims 9 and 10, characterized in that the angle α of the binocular head (20) between the horizontal and the ocular optical path can be fixedly preset to, preferably, between 7.5° and 20.0°.

12. The tube as claimed in one of claims 1 and 11, characterized in that a holding element (22) is provided on which the deflection device (15) and the deflection mirror (18) are mounted.

13. The tube as claimed in claim 12, characterized in that the deflection element (15) is a prism.

14. The tube as claimed in one of claims 12 and 13, characterized in that the holding element (22) is surrounded by a housing consisting of a lower housing part (23) and an upper housing part (24).

15. The tube as claimed in claim 12, characterized in that the upper housing part (24) has a recess (25) into which a mounting part (26) for the binocular head (20) can be inserted.

16. The tube as claimed in claim 12, characterized in that the binocular head (20) as well as the single tube-lens system (11) are attached in or on the holding element (22).

17. The tube as claimed in one of claims 1 to 16, characterized in that the distance between the deflection element (15) and the deflection mirror (18) lies in the range of between 0.125 times and 0.150 times the focal distance of the single tube-lens system (11).